

insect, *Aspidiotus destructor*. In 1913 he was called to the Samoan Islands on a similar study for the copra industry in which the most important insect pest proved to be a rhinoceros beetle, *Oryctes rhinoceros*.

It was in 1908 that Professor Doane began a study of insect problems connected with the destruction of plant life in the vicinity of industrial plants in the western United States. These problems were for the most part localized around the ore-smelting and chemical plants in the mining districts. He became a recognized authority in this field and his services as consulting entomologist were often requested by industrial corporations. Yet another phase of applied entomology that drew his interest was the control of mosquitoes in the San Francisco Bay area, where for many years he was chairman of the Matedero Mosquito Abatement District.

In taxonomic entomology Professor Doane was interested in Diptera and very early in his work specialized in the Trypetidae and Tipulidae. While at Washington State College he brought together large collections of both families and described many new species. He continued his work on this group while at Stanford, where he described a number of new species of Tipulidae, some of which were of economic importance.

Professor Doane is remembered by his students as an energetic, kindly instructor who was always ready to guide and help them in the acquisition of useful knowledge. In 1908 there was a small group of advanced students at Stanford who were planning to enter forestry and desired instruction in forest entomology. To accommodate this group he instituted a course in forest insects, based primarily upon the insect problems in western forests. This was one of the first, if not the first, courses in forest entomology set up by any of the larger universities in the west; and in its first year it called for the cooperation of class and instructor in getting the most out of the material available. The course was developed and continued throughout the remainder of his teaching career. Later, as forest entomology became recognized at other schools on the Pacific coast, Professor Doane took the leadership in combining under joint authorship with E. C. Van Dyke, W. J. Chamberlain and H. E. Burke a text-book, "Forest Insects," which was published in 1936.

The teaching of entomology in its application to diseases that affect man was among the more important courses which he covered during his long career at Stanford. This subject formed the material for his first book, "Insects and Disease," which was published in 1910. In 1915 he published with Dr. Kellogg a text-book, "Economic Zoology and Entomology." "Common Pests," a reference book dealing with in-

sects and other pests affecting man, was published in 1931.

Both in his teaching and in his writing, Professor Doane possessed the facility to express technical material in clear, simplified language. A list of his publications prepared by Dr. G. F. Ferris shows a list of fifty articles and books. The published papers covered his taxonomic work on the Tipulidae and Trypetidae, the results of his investigations of insect enemies of the cocoanut palm, an article on the mosquitoes of the Society Islands, an article on mosquito control and several papers on western forest insects.

He was a member of a number of scientific societies, including the American Association for the Advancement of Science, the American Association of Economic Entomologists, the Ecological Society of America and the Sigma Xi.

The last years of Professor Doane's life were troubled by frequent periods of illness, but these did not break his always forward outlook or his enthusiasm in planning for things ahead. Among his most characteristic qualities were his energy and his tenacity in completing those tasks which he considered worth while. He always took a deep personal interest in the welfare of his students that followed them into the later walks of life. His wide background of experience and inborn kindness made him a valuable counselor to all those who came within his influence. Once he recognized promise and worth in those with whom he worked, his loyalty and sympathy never faltered.

JOHN M. MILLER

U. S. BUREAU OF ENTOMOLOGY AND
PLANT QUARANTINE,
UNIVERSITY OF CALIFORNIA AT BERKELEY

LESLIE LELAND LOCKE

LESLIE LELAND LOCKE, long well known as an authority upon the history of mathematical instruments, in particular the Peruvian quipu and calculating machines, died at his home in Brooklyn at the age of sixty-three years, on August 28, 1943.

In addition to many scientific articles in mathematical journals, Professor Locke wrote an authoritative work, "The Ancient Quipu or Peruvian Knot Record," published in 1923 by the American Museum of Natural History, with a supplement in 1928.

His collection of early calculating machines was presented by Mr. Locke recently to the Smithsonian Institution. Valuable early American text-books were presented by Mr. Locke to the University of Michigan.

After graduation at Grove City College and post-graduate work at Grove City College (A.M. in 1900), Pennsylvania State College, Cornell University and Columbia University, Mr. Locke taught at Michigan State College, before establishing his teaching in

Brooklyn. First at Adelphi College, and then for twenty-two years at Brooklyn College and the Technical High School, Mr. Locke established a reputation both as an able teacher and a learned investigator and writer on the history of mathematics.

LOUIS C. KARPINSKI

RECENT DEATHS

DR. JOHN M. MACFARLANE, since 1920 professor emeritus of botany of the University of Pennsylvania, died on September 16 at the age of eighty-seven years.

DR. FREEMAN WARD, professor of geology and head

of the department of geology of Lafayette College, died on September 14. He was sixty-four years old.

DR. IVON R. TAYLOR, associate professor of psychology at Brown University, died on September 20. He was forty-five years old.

DR. CHARLES E. RESSER, since 1914 assistant curator of paleontology and curator of invertebrate paleontology and paleobotany at the Smithsonian Institution, died on September 17 at the age of fifty-four years.

HAL W. HARDINGE, mining and metallurgical engineer and inventor, died on September 15. He would have been eighty-eight years old on September 30.

SCIENTIFIC EVENTS

THE NORTH PACIFIC PLANNING PROJECT

AT a meeting last August, according to *The New York Times*, the National Resources Planning Board suggested to the co-chairmen of the Joint Economic Committees of the United States and Canada that the possibilities of the North Pacific region would merit careful study. As a result the two nations have begun the North Pacific planning project, the first step of which is to study the area preliminary to considering proposals for developing its resources, improving living standards and increasing the population, now about one hundred thousand.

The joint committees decided to sponsor such a survey, and the following aims have been announced:

(1) Enhanced security for Alaska, Canada and North America through well-conceived development of the North Pacific.

(2) Positive and active use of the area as a strategic key in a post-war system of world security.

(3) Development of the resources and transportation advantages as contributions to a better balanced continental economy.

(4) Development of economic opportunity for demobilized service-men and others who are adaptable to the region.

(5) A demonstration of the potential benefits of international collaboration in the development of backward and unoccupied areas; a testing of the various devices for implementing collaboration between all the governmental and corporate organizations and commissions and treaties between the two nations.

The United States National Resources Planning Board has provided the full-time assistance of its Alaska regional office staff, with headquarters at Portland, Oregon. James C. Rettie, of Portland, has been designated United States co-director. Actively participating are the Departments of State, Agriculture and Interior and the Board of Economic Warfare, together with Federal and territorial agencies in Alaska.

For Canada, Dr. Charles Camsell, deputy minister of the Department of Mines and Resources, has been named Canadian co-director, with agencies of the Dominion and of the provincial government of British Columbia cooperating.

The specific boundaries of the territory to be considered have not yet been clearly defined, pending the outcome of the study. Mr. Camsell said that the territory embraces part of Alberta, the northern half of British Columbia, the Yukon Territory, Alaska and the Mackenzie River portion of the Northwest Territories. He said that the eastern boundary would take in all territory which had any bearing on the economic aspect of the new Canada-Alaska highway and its related air routes.

ESCUELA AGRICOLA PANAMERICANA

THIS institution, situated twenty-five miles from Tegucigalpa, capital of the Republic of Honduras, opened its doors on September 1 with seventy-four students representing seven countries—Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama. Its establishment was made possible by a gift of \$500,000 from the United Fruit Company of Boston. It is governed by a board of directors composed of Samuel Zemurray, president; W. Latimer Gray, secretary-treasurer; Thomas Barbour, Thomas D. Cabot and T. Jefferson Coolidge. Operation is carried out through a board of regents, of which the members are Wilson Popenoe, chairman; Fernando Castro C., Luis Landa, Carlos Mirón, Doris Zemurray Stone, W. L. Taillon and Walter E. Turnbull.

All students enjoy full scholarships, including transportation from their homes to the school, board, lodging, clothing, laundry service, medical attention and tuition. Equipment includes 3,500 acres of land, lying between 2,500 and 5,000 feet in elevation; a